

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

JOHNSTECH INTERNATIONAL CORP.,
Plaintiff,
v.
JF MICROTECHNOLOGY SDN BHD,
Defendant.

Case No. [14-cv-02864-JD](#)

CLAIM CONSTRUCTION ORDER

Re: Dkt. No. 71

The parties in this patent infringement action seek construction of five phrases from asserted claims in U.S. Patent No. 7,059,866 (the “’866 patent”). In addition to the usual construction issues, they dispute indefiniteness and means-plus-function questions for some of the phrases. The Court received full briefing from the parties and held argument on claim construction.

BACKGROUND

Plaintiff Johnstech International Corporation (“Johnstech”) asserts all four claims of the ’866 patent against defendant JF Microtechnology SDN BHD (“JFM”). The ’866 patent describes an apparatus for use in testing integrated circuit devices. ’866 patent at Abstract.¹ The apparatus facilitates a temporary electrical connection between an integrated circuit device being tested and a “load board” on a testing machine. *Id.* at 1:13-23, 2:43-45. As the patent describes, conductive “contacts” inside a “housing” are positioned between electrical “leads” on the integrated circuit device and electrical “terminals or pads” on the load board. *Id.* at 2:39-47, Figure 1. A temporary interconnection forms when the integrated circuit is moved toward the housing and presses against the contacts. *Id.* at 3:23-28. Under this pressure, elastomers holding the contacts deform, and the

¹ A copy of the ’866 patent may be found at Dkt. No. 68-1, Exh. A.

contacts rotate so that they press against both the integrated circuit's leads and the load board's terminals or pads. *Id.* at 3:23-37, Figure 1. This interconnection allows electricity to flow from the load board, through the contact, and into the integrated circuit being tested. *Id.* at 1:14-18, 3:35-37. According to the patent, the patented apparatus provided improvement over the prior art by enabling the contact to be pressed against the integrated circuit and load board with sufficient force, while at the same time minimizing erosion of the load board. *Id.* at 2:21-24.

LEGAL STANDARD

A. Claim Construction

Claim construction analysis “must begin and remain centered on the claim language itself, for that is the language the patentee has chosen to particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.” *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, 753 F.3d 1291, 1299 (Fed. Cir. 2014) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). Claim terms are given their “ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (internal quotation omitted). “The subjective intent of the inventor when he used a particular term is of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history).” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 985 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). “Rather the focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean.” *Markman*, 52 F.3d at 986. The parties do not dispute the definition of a person of ordinary skill in the art.

As the Federal Circuit recently underscored, the “only meaning that matters in claim construction is the meaning in the context of the patent.” *Trustees of Columbia Univ. v. Symantec Corp.*, No. 2015–1146, 2016 WL 386068, at *3 (Fed. Cir. Feb. 2, 2016). The presumption that plain and ordinary meaning can be overcome only by a patentee’s express definition of a term or express disavowal of the scope of the claim has been clarified. *Id.* A term may be redefined “by implication” when given a meaning that is ascertainable from a reading of the specification or the

1 patent documents. *Id.* Redefinition and disavowal need not be explicitly stated or called out in
2 *haec verba. Id.* at *2.

3 With this teaching, the rule that a claim and its constituent words and phrases are
4 interpreted in light of the intrinsic evidence flourishes anew. The touchstones are the claims
5 themselves, the specification and, if in evidence, the prosecution history. *Phillips*, 415 F.3d at
6 1312-17. This intrinsic evidence is the most significant source of the legally operative meaning of
7 disputed claim language. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir.
8 1996). The claim language can “provide substantial guidance as to the meaning of particular
9 claim terms,” both through the context in which the claim terms are used and by considering other
10 claims in the same patent. *Phillips*, 415 F.3d at 1314. The specification is also a crucial source of
11 information: although it is improper to read limitations from the specification into the claims, the
12 specification is “the single best guide to the meaning of a disputed term.” *Id.* at 1315 (“[T]he
13 specification ‘is always highly relevant to the claim construction analysis. Usually, it is
14 dispositive . . .’”) (internal quotations omitted); *see also Merck & Co., Inc. v. Teva Pharms. USA,*
15 *Inc.*, 347 F.3d 1367, 1370 (Fed. Cir. 2003) (“[C]laims must be construed so as to be consistent
16 with the specification . . .”). But courts may also use extrinsic evidence (*e.g.*, dictionaries,
17 treatises) to resolve the scope and meaning of a claim when circumstances warrant that. *Phillips*,
18 415 F.3d at 1317.

19 The parties agree that the patents here include “means-plus-function” claims subject to 35
20 U.S.C. § 112 ¶ 6, which requires the application of another set of interpretive rules.² Under
21 Section 112 ¶ 6, a claim limitation “expressed as a means or step for performing a specified
22 function without the recital of structure, material, or acts” must be “construed to cover the
23 corresponding structure, material, or acts described in the specification and equivalents thereof.”
24 Construction of a means-plus-function term involves two steps: (1) defining the particular function
25 of the claim limitation, and (2) identifying the corresponding structure for that function. *See Noah*
26 *Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311 (Fed. Cir. 2012). The corresponding structure must

27
28 ² The 2011 America Invents Act (AIA) renumbered Section 112 ¶ 6 to Section 112(f). Because the '866 patent predates the effective date of the AIA, the older section numbering will be used.

1 include all structure that is necessary and “‘actually performs the recited function.’” *Applied Med.*
 2 *Res. Corp. v. U.S. Surgical Corp.*, 312 F. App’x 326, 333 (Fed. Cir. 2009) (quoting *Cardiac*
 3 *Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002)); *Northrop*
 4 *Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1352 (Fed. Cir. 2003). However, “the identified
 5 structure cannot include that which does not perform the recited function.” *Applied Med.*, 312 F.
 6 App’x. at 335 n.4 (citing *Asyst Technologies, Inc. v. Empak, Inc.*, 268 F.3d 1364, 1370 (Fed. Cir.
 7 2001)).

8 **B. Indefiniteness**

9 Patent claims must “particularly poin[t] out and distinctly clai[m] the subject matter which
 10 the applicant regards as his invention.” 35 U.S.C. § 112 ¶ 2. A claim fails to satisfy this
 11 requirement and is invalid if its language, when read in light of the specification and the
 12 prosecution history, “fail[s] to inform, with reasonable certainty, those skilled in the art about the
 13 scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S.Ct. 2120, 2124 (2014).
 14 To be sure, definiteness requires neither “absolute” nor “mathematical precision.” *Interval*
 15 *Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014), *cert. denied*, 136 S.Ct. 59
 16 (2015) (citations omitted). “Claim language employing terms of degree has long been found
 17 definite where it provided enough certainty to one of skill in the art when read in the context of the
 18 invention.” *Id.* (citing *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 65–66
 19 (1923), which found “substantial pitch” definite, and also citing *Enzo Biochem, Inc. v. Applera*
 20 *Corp.*, 599 F.3d 1325, 1335 (Fed. Cir. 2010), which found “not interfering substantially” definite).
 21 Because patents are entitled to a presumption of validity, any fact critical to a holding on
 22 indefiniteness must be proven by clear and convincing evidence. *See Altera Corp. v. PACT XPP*
 23 *Techs.*, AG, No. 14-CV-02868-JD, 2015 WL 4999952, at *3 (N.D. Cal. Aug. 21, 2015) (citing
 24 *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003) and *Nautilus*, 134 S.Ct. at
 25 2130 n.10).

CLAIM CONSTRUCTION

A. “An apparatus for electrically connecting a lead of the integrated circuit to be tested to a corresponding terminal of a load board at a test site” (claim 1 preamble)

Johnstech’s Proposed Construction	JFM’s Proposed Construction	Court’s Construction
No construction needed.	“An apparatus for electrically connecting an electrical conductor portion of the computer chip to be tested to a corresponding part or pad for making an electrical connection on the circuit board of a tester at a test location”	No construction of terms required; preamble is limiting.

The parties’ disagreement over the claim 1 preamble has two parts. They dispute whether certain terms in the preamble should be construed at all, and the degree to which the preamble should be read as a limitation on the claim.

As a threshold matter, the Court declines to construe the isolated preamble terms “lead of the integrated circuit” and “terminal of a load board at a test site.” As the Federal Circuit has explained, “district courts are not (and should not be) required to construe *every* limitation present in a patent’s asserted claims.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (emphasis in original). Rather, claim construction means to resolve disputed meanings and technical scope of claims for use in an infringement determination. *Id.* Because the Court finds the meaning of the identified terms clear in the context of the invention and the body of the claim, and because they will not be difficult to explain to a jury, the Court declines to construe the terms in the absence of any dispute between the parties over the scope or meaning of the words themselves. *See, e.g.*, Dkt. No. 71 at 7 (plaintiff agrees that the words used in defendant’s proposed construction are not wrong, but still maintains that no construction is necessary). Furthermore, JFM has provided no support (intrinsic or extrinsic) in its briefing for its proposed wording choices, and no justification beyond a bare statement at the hearing that they might clarify the terms for a jury. *See* Dkt. No. 101 at 13:11-13.

The parties mainly dispute the degree to which the preamble limits the claim. Johnstech argues that the preamble is not limiting because the body of the claim “fully sets forth all of the

limitations” of the invention, and so the preamble “merely states the purpose or intended use of the invention.” Dkt. No. 71 at 7-8 (citing *Pitney-Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)). JFM insists that the preamble terms “lead of the integrated circuit” and “terminal of a load board” are “necessary and defining aspects of the invention” because they provide antecedent basis for terms in the claim body, and because certain claim limitations are “defined relative to” the preamble terms. Dkt. No. 78 at 10-11. JFM also asserts that if the preamble is limiting, it could only be found infringing if it actually sold the apparatus together with the “integrated circuit” and “load board” mentioned in the preamble. Dkt. No. 78 at 10; Dkt. No. 101 at 15:9-16, 16:23-17:1.

The Court finds that the preamble of claim 1 “is necessary to give life, meaning, and vitality to the claim.” *See Proveris Scientific Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1372 (Fed. Cir. 2014) (quoting *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1305 (Fed. Cir. 2005)). This is so because the preamble provides the antecedent for the terms “the lead,” “the integrated circuit,” “the terminal,” and “the load board” in the claim body. ’866 patent at 4:32-34, 36-37, 41-46, 51; *see Proveris*, 739 F.3d at 1373 (preamble found limiting where limitation in the claim body “clearly derives antecedent basis” from phrase “defined in greater detail in the preamble”). Without that antecedent in the preamble, the same terms in the claims are untethered to a clear meaning.

In addition, the configuration of the structural elements described in the claim body cannot be understood without reference to the interrelationships of the different preamble terms. *See Pitney Bowes*, 182 F.3d 1 at 1306 (finding preamble limiting where it “is intimately meshed with the ensuing language in the claim.”) For example, the preamble sets forth certain relationships between the preamble terms: “a lead of the integrated circuit” and “a corresponding terminal of a load board at a test site”). ’866 patent at 4:32-34 (emphasis added). But the different claim limitations only refer to one or another of these terms. For example, some limitations in the claim body are described in relation to the “the lead” and others in relation to the “the integrated circuit”; some terms are described in terms of the “terminal” rather than the “load board.” *See, e.g.*, ’866 patent at 4:36-38 (describing one of the “facing surfaces” of the claimed “housing” as

“approachable by an integrated circuit” and the second as “proximate the load board”); *id.* at 4:41-43 (describing the claimed “contact” as having a first end engagable by “the lead” and a second end in engagement with “the terminal.”) Without the structural context from the preamble, the configuration of these claim elements would be incomprehensible. Consequently, the preamble is limiting.

But this does not mean that the preamble limits the claim any more than its plain language requires. *See Pitney Bowes*, 182 F.3d at 1305 (“[A] claim preamble has the import that the claim as a whole suggests for it”) (quoting *Bell Commc’ns Research, Inc. v. Vitalink Commc’ns Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995)). JFM says that the preamble, if limiting, requires actual connections between the load board, integrated circuit, and claimed structural elements for infringement, but this interpretation requires inferential leaps not supported by the language of the preamble itself or the law it cites. *See, e.g.*, Dkt. No. 78 at 10-11; Dkt. No. 101 at 14:13-14, 14:17-19, 15:9-10, 15:13, 15:16, 15:19-16:1, 16:13-17:1. Here, the preamble recites an “[a]pparatus *for* electrically connecting a lead of the integrated circuit to be tested to a corresponding terminal of a load board at a test site.” ’866 patent at 4:32-34. Even though limiting, the preamble requires only that an apparatus be designed, intended or used “for” the recited function. Its plain language requires nothing more.

B. “...engagable by ... in engagement with ... unengaged by ... engaged by” (claim 1)

Johnstech’s Proposed Construction	JFM’s Proposed Construction	Parties’ Agreed Construction
No construction needed.	“... able to come together with ...connected with ... unconnected with ... connected by”	“... able to come together with ...connected with ... unconnected with ... connected by”

At the hearing, the parties agreed to JFM’s proposed construction for these terms. In light of the parties’ agreement regarding the terms, the Court declines to construe them further. *See* Dkt. No. 101 at 20:2-3, 20:14-19.

C. “means for biasing said contact to said first orientation, wherein, as said contact is rolled between said first and said second orientations thereof, sliding motion of said second end of said contact across the terminal is substantially eliminated” (claim 1)

Johnstech’s Proposed Construction	JFM’s Proposed Construction	Court’s Construction
<p>Construe only “means for biasing said contact to said first orientation” as means-plus-function</p> <p>Function: biasing the contact to a first orientation</p> <p>Structure: one or more elastomers 30 and 32</p>	<p>Construe whole phrase as means-plus-function</p> <p>Function: biasing the contact to the first orientation, wherein, as the contact is rolled between the first and second orientations, sliding motion of the second end of the contact across the terminal is prevented or precluded</p> <p>Structure: front elastomer 30, rear elastomer 32, and sloped terminus of contact tail 6 in engagement with housing wall 15, as shown and arranged in FIGURE</p>	<p>Construe whole phrase as means-plus-function</p> <p>Function: biasing the contact to the first orientation, wherein, as the contact is rolled between the first and second orientations, sliding motion of the second end of the contact across the terminal is substantially eliminated</p> <p>Structure: one or more elastomers (e.g., 30, 32 in Figure 1), a flat surface of the contact in engagement with the terminal pad (e.g., 28 in Figure 1), and a tail end of the contact in engagement with a wall of the housing (e.g., 6 in Figure 1)</p>

The parties bring multi-layered disputes regarding the “means for biasing” phrase. While they agree it should be construed pursuant to Section 112 ¶ 6, they disagree whether the clause beginning with the term “wherein” should be included in the construction of the “means for biasing,” whether the “wherein” clause should be separately construed under Section 112 ¶ 6, or whether it requires construction at all. Dkt. No. 71 at 10-11; Dkt. No. 78 at 12-14; Dkt. No. 81 at 2-4. In addition, the parties disagree on the construction of its function and structure. Dkt. No. 71 at 11-15; Dkt. No. 78 at 13-18; Dkt. No. 81 at 5-6.

1. Function of the “means for biasing” term

As a threshold matter, the parties agree that the “wherein” clause must be a limitation on the claim, because it contains a limitation “that distinguishes the prior art.” Dkt. No. 81 at 4 (“the wherein clause requires that sliding motion is ‘substantially eliminated’”); Dkt. No. 78 at 14 (arguing that “the wherein clause was the only reason the USPTO Examiner allowed the claims”); Dkt. No. 72-1, Exh. 7 at 2 (in the Oct. 12, 2005 Notice of Allowability, the examiner states that

1 the prior art “does not preclude sliding movement of the second end of the contact.”) Since the
2 wherein clause is undeniably “material to the patentability of the invention,” it must be a
3 limitation. *Griffin v. Bertina*, 285 F.3d 1029, 1034 (Fed. Cir. 2002) (finding a wherein clause
4 limiting where it “expresses the inventive discovery”).

5 The question then is whether the wherein clause should be added to the function of the
6 “means for biasing” term. The intrinsic evidence establishes that it should. The plain language of
7 the claim supports this result. In the body of the claim, the wherein clause immediately follows
8 the “means for biasing said contact to said first orientation” phrase. ’866 patent at 4:49-53. They
9 reside together in a single paragraph in the body of the claim, while the other two structural
10 limitations of the claim -- the “housing” and the “contact” -- are in set forth in separate paragraphs
11 of their own. *Id.* at 4:35-48. Johnstech’s argument that the word “wherein” was “intended to
12 separate the means-plus-function language from the other parts of the claim” is not consistent
13 with the patentee’s choice to put the phrases together in a single paragraph. Dkt. No. 71 at 12; *see*
14 *Source Vagabond*, 753 F.3d at 1299 (claim construction centers on the claim language “the
15 patentee has chosen to particularly point[] out and distinctly claim[] the subject matter which [he]
16 regards as his invention” (internal quotation omitted)).

17 Joint construction of the two phrases also makes sense based on the logical relation
18 between the operations described in the two phrases. The first part of the “means for biasing”
19 phrase recites that the “means” facilitates “biasing,” or movement, of the “contact” to a “first
20 orientation.” ’866 patent at 4:49. The “wherein” clause that immediately follows describes
21 another movement of the same “contact,” between the “first” orientation and a “second
22 orientation,” further requiring that this movement occur with “substantially eliminated” “sliding
23 motion.” *Id.* at 4:50-53. That the two clauses relate to movements of the “contact” towards or
24 away from the “first orientation” further indicates that the clauses should be construed together.
25 *See, e.g., Intergraph Hardware Techs. Co. v. Toshiba Corp.*, 508 F. Supp. 2d 752, 768-69 (N.D.
26 Cal. 2007) (a “wherein” clause recited an additional function for a “primary memory interface
27 means” because the clause stated “actions directly involving the structures or limitations at
28 issue”); *see also Aloft Media, LLC v. Adobe Sys. Inc.*, 570 F. Supp. 2d 887, 896-97 (E.D. Tex.

2008) (a “wherein” clause provided additional functions for “computer code” elements, even though the phrases were not explicitly connected in the text, where they referenced terms “defined or introduced” in the “computer code” elements), *adopted*, No. 6:07-CV-355, 2008 WL 5784443 (E.D. Tex. Sept. 24, 2008).

The prosecution history also supports construing the phrases together. As the parties acknowledged at the hearing, in the original, as-filed patent application, the “means for biasing” and “wherein” phrases were in separate paragraphs separated by a semi-colon.³ U.S. Patent Application Serial No. 10/829,577 (filed April 22, 2004), Specification at 10; Dkt. No. 101 at 4:11-13. In the only amendment made to the claims during prosecution, the patentee eliminated the semi-colon, and combined the two phrases into a single paragraph with only a comma between them. Dkt. No. 72-1, Exh. 6 at 3. Even if Johnstech were correct that the amendment was not “intentionally made,” *see* Dkt. No. 101 at 5:24-25, a patentee’s unstated “subjective intent” carries no weight in claim construction. *See Markman*, 52 F.3d at 985-86. Even if this change were an error, it is not an “obvious error” that the Court could correct. *See Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003) (the Court may only correct errors “if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.”) In short, all of the intrinsic evidence points to construing the phrases together.

Johnstech fails to persuade that the wherein clause should be liberated from Section 112 ¶ 6. Johnstech suggests that the wherein clause needs no construction because the preceding structural limitations of claim 1, all taken together (*i.e.*, the “housing,” the “contact,” and the “means for biasing”) provide all the necessary structure to perform the clause’s function (*i.e.*,

³ The Court “should also consider the patent’s prosecution history, if it is in evidence” because “like the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent.” *Phillips*, 415 F.3d at 1317 (internal quotation omitted). The prosecution history is an “undisputed public record of proceedings in the Patent and Trademark Office” and “is of primary significance in understanding the claims.” *Markman*, 52 F.3d at 980 (internal quotation omitted). Accordingly, the Court can take judicial notice of the prosecution history of the ’866 patent. *See* Fed. R. Evid. 201; *see Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 897 F.2d 511, 514 n.3 (Fed. Cir. 1990). The parties addressed these portions of the prosecution history at the claim construction hearing and did not object to the Court’s consideration of these facts in claim construction.

substantially eliminating sliding “as said contact is rolled”). *See* Dkt. No. 81 at 3-4. But nothing in the claim’s description of the “housing” or “contact” even hints at the structural engagement between the housing wall and contact that the specification describes as one of the keys to reducing the sliding. *See* ’866 patent at 4:35-48 (describing both the “housing” and “contact” only in terms of the “load board,” “integrated circuit,” “lead,” and “terminal,” but not in terms of each other); *see id.* at 2:13-20 (describing how the contact “engages a wall of the housing . . . to positively prevent the contact from sliding along the terminal of the load board by maintaining the position of the contact relative to the housing.”) These facts show that the wherein clause should be subject to Section 112 ¶ 6. *See Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) (“[W]here the claim uses functional language but recites insufficient structure, § 112, ¶ 6 may apply despite the lack of ‘means for’ language”); *see also Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015).

Construing the “means for biasing” phrase as a whole, the Court determines that the function of the means-plus-function term is “biasing the contact to the first orientation, wherein, as the contact is rolled between the first and second orientations, sliding motion of the second end of the contact across the terminal is substantially eliminated.”

2. Structure of the “means for biasing” term

The parties also disagree on the corresponding structure to the means claim. At a general level, they agree that some number of elastomers and some degree of “engagement” between the tail end of the contact and the housing wall are required structure. But they dispute how many elastomers are required. *See* Dkt. No. 71 at 13 (“one or more”); Dkt. No. 78 at 12-13 (“front elastomer 30, rear elastomer 32”). And they disagree on the required structural engagement of the contact tail with the wall. *See* Dkt. No. 81 at 5 (Johnstech: “engagement of the tail of the contact with the rear wall”); Dkt. No. 101 at 26:4-10 (“indirect” engagement of the housing wall is covered by scope of claim, not just “connect[ion]”); *id.* at 34:6-12, 34:15, 34:19-22 (similar); Dkt. No. 78 at 13 (JFM: “sloped terminus of contact tail 6 in engagement with housing wall 15, as shown and arranged in the FIGURE”); Dkt. No. 101 at 32:18-19 (“engagement of the contact tail with the wall of the housing.”).

Each of the parties' proffered constructions fail to account for "all structure that actually performs the recited function." *See Applied Med.*, 312 F. App'x at 333 (quoting *Cardiac Pacemakers*, 296 F.3d at 1119). The '866 patent identifies three structural elements that contribute to "preventing sliding": (1) a "linear contact surface of the tail, adjacent the curved surface, [that] is parallel to and in engagement with the terminal pad of the load board," so that its "engagement portion ... with the terminal pad moves" as the contact rolls back and forth, *see* '866 patent at 2:5-12, 3:64-4:11, Figure 1 at 29, (2) a "terminus of the contact tail" that "has a surface that engages a wall of the housing," as "[t]his surface serves to positively prevent the contact from sliding ... by maintaining the position of the contact relative to the housing," *see id.* at 2:13-17, 3:58-61, Figure 1 at 6, and (3) "[t]he front elastomer [which] also plays a role ... by urging the tail of the contact toward the housing wall." *Id.* at 2:17-20, 3:61-63, Figure 1 at 30. All of these must be included in the corresponding structure. *See Applied Med.*, 312 F. App'x at 333.

The Court rejects JFM's contention that the structure should be limited to a plurality of elastomers, since the specification clearly discloses that "[t]his design can be alternatively configured as a single elastomer system." '866 patent at 4:18-19; *see In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1324 (Fed. Cir. 2011) ("[T]here is a strong presumption against a claim construction that excludes a disclosed embodiment").

The Court also declines to add the restriction of a "sloped terminus" to the tail of the structure, because this property appears to be a preferred embodiment that should not be imported into the structure. *See Epos Techs. Ltd. v. Pegasus Techs. Ltd.*, 766 F.3d 1338, 1341 (Fed. Cir. 2014) ("it is improper to read limitations from a preferred embodiment described in the specification -- even if it is the only embodiment -- into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited") (internal quotation omitted); *see* Dkt. No. 78 at 17 (arguing the '866 patent's only embodiment contains a sloped tail). Unlike the "terminus of the contact tail" structure, a "sloped" terminus is not described or discussed in the "Summary of the Invention" section of the patent. '866 patent at 2:13-17. The sole passage in the specification that mentions a "sloped terminus" describes it merely as "instrumental," '866 patent at 3:58-61, suggesting it may merely "function[] in the promotion of

some end,” rather than being essential. *See Webster’s Third New Int’l Dictionary* 1172 (2002); *see also* Figure 1 (showing sloped terminus 6). Without a clearer indication that the patentee recognized the sloped terminus as essential structure, the Court will not import this limitation in the claim construction.

Because the patent does not show or disclose any structures in which sliding is “substantially eliminated” using an indirect engagement between the contact and housing wall, Johnstech goes too far in contending that the corresponding structure expressly covers “indirect” engagement between the contact and the wall. *See* 35 U.S.C. § 112 ¶ 6 (claim “construed to cover the corresponding structure, material, or acts described in the specification”); *see* Dkt. No. 101 at 26:4-10 (Johnstech argues for “indirect” connection). But the reach of a claim under Section 112 ¶ 6 extends to “equivalents” of the claimed structure. *See* 35 U.S.C. § 112 ¶ 6; *Frank’s Casing Crew & Rental Tools, Inc. v. Weatherford Int’l, Inc.*, 389 F.3d 1370, 1378 (Fed. Cir. 2004) (describing the different tests employed to find infringement under Section 112 ¶ 6 equivalence and the doctrine of equivalents). Although the Court is a bit skeptical the claims will ultimately reach that far, the current record does not foreclose the possibility that some structure that, although indirectly contacting the wall, might qualify as an equivalent. *See id.*

Consequently, the Court construes the structure of the term as “one or more elastomers (e.g., 30, 32 in Figure 1), a flat surface of the contact in engagement with the terminal pad (e.g., 28 in Figure 1), and a tail end of the contact in engagement with a wall of the housing (e.g., 6 in Figure 1).”

D. “substantially eliminated” (claim 1)

Johnstech’s Proposed Construction	JFM’s Proposed Construction	Court’s Construction
largely but not wholly eliminated	precluded or prevented	approximately eliminated

JFM incorrectly argues that the only embodiment described in the patent requires that sliding be entirely “prevented or precluded.” Dkt. No. 78 at 21. The patent clearly discloses a “contact configuration [that] tends to substantially eliminate sliding motion of the contact against the terminal pad of the load board.” ’866 patent at 2:7-9. The patent examiner’s use of the term

1 “precluded” instead of “substantially eliminated” in the notice of allowance does not amount to a
2 redefinition of the term or disavowal of claim scope by the patentee.

3 “The word ‘substantially,’ when used in a claim, can denote either language of
4 approximation or language of magnitude.” *See Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d
5 1325, 1333-34 (Fed. Cir. 2010) (quoting *Deering Precision Instruments, LLC v. Vector Distrib.*
6 *Sys., Inc.*, 347 F.3d 1314, 1323 (Fed. Cir. 2003)); *Deering*, 347 F.3d at 1323 (“‘substantially’ can
7 mean ‘significantly’ or ‘considerably.’” Or it “can also mean ‘largely’ or ‘essentially’”) (quoting
8 *Webster’s New 20th Century Dictionary* 1817 (1983)); *Epcon Gas Sys., Inc. v. Bauer*
9 *Compressors, Inc.*, 279 F.3d 1022, 1031 (Fed. Cir. 2002) (“The phrase ‘substantially constant’
10 denotes language of approximation, while the phrase ‘substantially below’ signifies language of
11 magnitude, i.e., not insubstantial.”) Because the term “substantially” is capable of multiple
12 interpretations, the intrinsic evidence guides the determination of which interpretation should be
13 adopted. *Deering*, 347 F.3d at 1323.

14 Here, “substantially” is a term of approximation. The patent specification and claims
15 describe the amount of sliding motion permitted by the invention as “substantially eliminated” or
16 “prevent[ed].” *See, e.g.*, ’866 patent at 2:8, 2:12, 2:15, 3:48, 3:55, 3:60, 4:53. The term
17 “precluded” only shows up in the original, as-filed claims and prosecution history. *See, e.g.*, Dkt.
18 No. 78 at 21-22; Dkt. No. 72-1, Exh. 7 at 2; U.S. Patent Application Serial No. 10/829,577 (filed
19 April 22, 2004), Specification at 10. These words and the parties’ proposed constructions all
20 indicate that the goal of the patent is to eliminate the sliding as much as possible. *See* Dkt. No. 71
21 at 15 (Johnstech: “largely but not wholly eliminated”); Dkt. No. 78 at 18 (JFM: “precluded or
22 prevented”). When used in this way, “substantially” may be construed as “approximately.” *See*
23 *Swanson v. Alza Corp.*, No. C 12-4579 PJH, 2014 WL 1668833, at *9 (N.D. Cal. Apr. 25, 2014);
24 *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1329 (Fed. Cir. 2006).

25 JFM unconvincingly argues that the term is indefinite because the patent provides “no
26 objective boundary” for determining the scope of the invention. *See* Dkt. No. 78 at 20-21. To the
27 contrary, the patent suggests two boundaries -- on one side, an apparatus that completely
28 eliminates sliding (whose contact only rolls), and on the other side, an apparatus that works by a

primary mechanism of sliding, the Johnson patent described in the prosecution history. *See, e.g.*, Dkt. No. 72-1, Exh. 7 at 2. Claim 1 of the '866 patent covers apparatuses that “approximate” the former. A person of skill in the art would be able to recognize this distinction between contacts that that primarily roll or primarily slide, and determine whether his product approximated or was equivalent to the former and so fell inside the claim. Because the claim and the patent provide “enough certainty to one of skill in the art when read in the context of the invention,” the claim is not indefinite. *Interval Licensing*, 766 F.3d at 1370.

The Court construes “substantially eliminated” as “approximately eliminated.”

E. “contact is generally S-shaped” (claim 2)

Johnstech’s Proposed Construction	JFM’s Proposed Construction	Parties’ Agreed Construction
Contact is generally shaped like the letter S, which is generally flatter at the beginning and end and steeper in the middle.	Contact is generally shaped like the letter S.	No construction necessary.

At the hearing, the parties agreed that the phrase “contact is generally S-shaped” did not require further construction, as it means only that the contact is generally in the shape of the letter S. Dkt. No. 101 at 36:7-8, 36:11. In light of the parties’ agreement regarding this term, the Court declines to construe the phrase.

IT IS SO ORDERED.

Dated: February 17, 2016


 JAMES DONATO
 United States District Judge